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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,347	09/26/2003	Takehisa Yoshikawa	520.41902VX1	5257

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EXAMINER

HASAN, MOHAMMED A

ART UNIT PAPER NUMBER

2873

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/670,347	Applicant(s) YOSHIKAWA ET AL.	
	Examiner Mohammed Hasan	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37 - 59 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37 - 42, 44 - 58 is/are allowed.
- 6) ☒ Claim(s) 43 and 59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/26/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt of acknowledged of papers submitted under 35 U.S.C. 119 (a) – (d), which papers have placed of record in the file.

Oath/Declaration

2. Oath and declaration filed on 9/26/2003 is accepted.

Information Disclosure Statement

3. The prior art documents submitted by applicant in the Information Disclosure Statement filed on September 26, 2003 have all been considered and made of record (note the attached copy of form PTO – 1449).

Specification

4. The disclosure is objected to because of the following informalities:
Claim 1, line 3, delete “ a as”, insert - - as a - -.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 43 is rejected under 35 U.S.C. 102 (b) as being anticipated by Yamashita et al (6,130,777).

Regarding claim 43, Yamashita et al discloses (refer to figures 6A and 6B) a component (11) (e.g., a lens sheet) comprising a part having a concave and convex configuration for enabling light diffusion (column 6, lines 24 – 37) and being formed as a reflective film and where concave and convex configuration is a half moon- shape (column 10, lines 17 – 47).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 59 is rejected under 35 U.S.C. 103(a) as being anticipated over Yamashita et al (6,130,777) in view of Kun (4,024,623).

Regarding claim 59, Yamashita et al discloses (refer to figure 6A and 6B) a method of forming a component (11) (e.g., a lens sheet) having a concave and convex configuration comprises: a step of forming concave and convex configuration on a die by cutting die (column 2, lines 10 – 17). Yamashita et al discloses all of the claim limitations except a step of forming concave and convex configuration on component by transferring with die or by transferring with a transfer master pattern transferred with die. However, Kun discloses (refer to figure 9) die – forming master pattern 201 (column 13, lines 49 – 68, column 14, lines 1 – 11) and concave and convex configuration (as shown in figures 1 and 3A, column 15, line 55, column 17, line 28). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a master pattern with the concave and convex configuration in to the Yamashita lenticular lens sheet for the purpose of suitable be employed as a heat exchange elements as taught by Kun (column 10, lines 40 – 42).

Allowable Subject Matter

7. Claims 37- 42, 44 - 58 are allowed.
8. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C.

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102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 37, 44, 47, 50, 53, and 56, for example which include a component a part having a concave and convex configuration for one of the enabling one of the light convergence and concave and convex configuration has a tangential angle defined at no greater than 23 degrees relative to a horizontal face (as in claim 37, and 53); and a cutting machine with an angle defined at edge angle of no greater than $\theta 2 \pm 3$ degrees or below in the case a tooth face of cutting tool stands vertical to a horizontal face (as in claim 44, 47, and 56); and a step of fixing a cutting tool having an edge angle $\theta 2$ defined at no greater than 20 degrees to a cutting machine (as in claim 50) .

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest reference

Kaminsky et al (6,636,363) discloses bulk complex polymer lens light diffuser.

Koelsch (6,109,158) discloses cutting die mounting system.

Conclusion


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272- 2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MH
February 18, 2004



Georgia Epps
Supervisory Patent Examiner
Technology Center 280n